

PATENT US 7,149,431 B2

CHC

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENTEE(S)

Dae-Kwang Jung et al.

PATENT NO.

US 7,149,431 B2

**ISSUED** 

December 12, 2006

**FOR** 

SELF-SEEDED FABRY-PEROT LASER DEVICE FOR

WAVELENGTH DIVISION MULTIPLEXING SYSTEM

### Certificate of Mailing Under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA. 22313 on

March 5, 2007.

Steve Cha, Reg. No. 44,069

(Name of Registered Rep.)

(Signature and Date)

# REQUEST FOR CERTIFICATE OF CORRECTION UNDER 37 CFR 1.323

Attention Certificate of Corrections Branch

Commissioner For Patents P.O. Box 1450 Alexandria, VA 22313-1450



Dear Sir:

In accordance with the provisions of 37 CFR 1.323, the Patent and Trademark Office is respectfully requested to issue a Certificate of Correction in the above-identified Patent to correct an error in the <u>foreign application priority number</u> on the face of the Patent (Item 30). The <u>foreign application priority number</u> should read

-- 10-2002-0062820--

as shown on the Filing Receipt, copy enclosed.

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As these mistakes were the fault of the Patent and Trademark Office, it is believed to be in order for the Patent and Trademark Office to issue a Certificate of Correction and to place such Certificate in the file, so that such will appear on any copies of the Patent which are ordered in the future. Moreover, since these mistakes are that of the Patent and Trademark Office, such should be done without charge.

Two (2) copies of Form PTO/SB/44 embodying the requested correction accompany this letter. Return of one copy of the Form duly certified is requested.

Respectfully submitted,

Steve Cha By: Attorney for Applicant Registration No. 44,069

Date: March 5, 2007

Enclosure: Copy of Filing Receipt

Form PTO/SB/44

Mail all correspondence to: Steve S. Cha, Reg. No. 44,069 CHA & REITER, LLC 210 Route 4 East, Suite #103 Paramus, NJ 07652

Telephone: 201-226-9245

Fax: 201-226-9246 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

(Also Form PTO-1050)

# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

CERTIFICATE OF CORRECTION			
	Page1 of1		
PATENT NO. : 7,149,431 B2	· — —		
APPLICATION NO.: 10/628,005			
ISSUE DATE : December 12, 2006			
INVENTOR(S) : Dae-Kwang Jung et al.			
It is certified that an error appears or errors appear in the above-identified patent and is hereby corrected as shown below:	that said Letters Patent		
Title Page Item [30], Foreign Application Priority Number, should read as follows:			
10/2002-0062820			
	i		

MAILING ADDRESS OF SENDER (Please do not use customer number below):

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This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Page <u>1</u> of <u>1</u>
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### (12) United States Patent Jung et al.

US 7,149,431 B2 (10) Patent No.: Dec. 12, 2006 (45) Date of Patent:

(54)	SELF-SEEDED FABRY-PEROT LASER DEVICE FOR WAVELENGTH DIVISION MULTIPLEXING SYSTEM
(75)	Inventors: Dae-Kwang Jung, Suwon-shi (KR Tae-Sung Park, Suwon-shi (KR)

Inventors:	Dae-Kwang Jung, Suwon-shi (KR);
	Tae-Sung Park, Suwon-shi (KR)

- Assignee: Samsung Electronics Co., Ltd., Suwon-Si (KR)
- Subject to any disclaimer, the term of this Notice: patent is extended or adjusted under 35 U.S.C. 154(b) by 459 days.
- Appl. No.: 10/628,005
- Jul. 25, 2003 Filed:
- (65)**Prior Publication Data** Apr. 15, 2004 US 2004/0071399 A1

#### Foreign Application Priority Data (30)(KR) .....[10-2000-0062820] -- 10-1002-0062820

(51)	Int. Cl.	
	H04B 10/00	(2006.01)

- (58) Field of Classification Search ...... 398/138, See application file for complete search history.

(56)References Cited

U.S. PATENT DOCUMENTS

4,749,878 A \* 6/1988 Snyder et al. ............... 327/114

				9.	
5,212,711	Α	*	5/1993	Harvey et al 372/94	
5,646,762	Α	*	7/1997	Delavaux et al 398/180	
5,691,989	Α	*	11/1997	Rakuljic et al 372/20	
5,917,633	Α	*	6/1999	Gambini et al 398/32	
6,067,181	Α	*	5/2000	Mizrahi 398/196	
6,078,418	Α	*	6/2000	Hansen et al 398/147	
6,445,478	B1	*		Shimizu et al 398/192	
6,744;792	В1	*	6/2004	Tayebati 372/32	
6,845,108	В1	*	1/2005	Liu et al 372/20	
2001/0004290	A1	*	6/2001	Lee et al 359/124	
2001/0019562	A1	*	9/2001	Kai et al 372/20	
2003/0080899				Lee et al 342/368	
2004/0101305				Jung et al 398/71	
				<del>-</del>	

\* cited by examiner

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#### **ABSTRACT** (57)

Disclosed is a Fabry-Perot laser device connected with an optical transmission link. The device comprises an optical circulator for forming an optical waveguide loop and circulating light through the optical waveguide loop and for outputting light from the optical waveguide loop through an external port; an optical fiber amplifier located on the optical waveguide loop and for amplifying the light circulating in the optical waveguide loop; a laser light source connected with the exterior port and being self-seeded by the light inputted through the exterior port and for outputting wavelength-locked light to the exterior port; and, a first splitter located on the loop for splitting a portion of the circulating light and for outputting the split-off light to the optical transmission link.

#### 12 Claims, 11 Drawing Sheets

